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U.S. Environmental Protection Agency
805 SW Broadway, Suite 500
Portland, OR 97205

Portland Harbor Cleanup Proposal - Comment Submission

The Friends of Baltimore Woods (FoBW) is an organization of community volunteers working to restore and preserve a woodland forest in North Portland. Baltimore Woods is a strip of public land that winds along the Willamette Bluff from Cathedral Park to Pier Park. An important purpose of the Woods is to filter pollution-laced runoff, preventing that pollution from reaching the river below. FoBW mobilized more than 1600 volunteer hours in the past year for restoring Baltimore Woods. In this way, FoBW is doing its part for our harbor's health.

We members of FoBW have studied the EPA's Proposed Portland Harbor Cleanup Plan (*Alternative I*). Below, we summarize the main reasons we find the plan to be inadequate, and recommend ways to strengthen it. We thank you for the opportunity to submit this comment:

Most of the contaminants remaining in our harbor - PCBs, dioxins/furans, and heavy metals – are non-degradable *in situ*. They will never degrade in the harbor . . . ever. *Alternative I* calls for leaving 89% of the contaminated area of the harbor floor to clear itself by "natural recovery," a process allowing these non-degradable, harmful contaminants to gradually leech into the river and eventually into the greater environment and the food web.

As far as we can tell, the EPA has only weak estimates of the mass and proportions of contaminants that *Alternative I* would leave on the harbor floor. The full effect of diffusing vast quantities of harmful contaminants into the environment is unknown. However, two things we do know: 1) Many of the harbor's contaminants are not safe at any level of exposure; and 2) Many of the contaminants concentrate increasingly as they are consumed up food chains.

Every cleanup plan, no matter how stringent, must allow for some diffusion of residual contaminants into the environment. There are diminishing returns, and physical limits we must accept. *Alternative I*, however, turns this notion on its head. It makes diffusion-into-the-environment the main mode of final disposal.

Alternative I can best be described as a system engineered to release our harbor's non-degradable contaminants into the environment at a rate that stays within pollution-control standards. For example, it calls for "capping" more severely contaminated areas of the harbor floor with clay. We can expect harmful contaminants to continue leeching from these areas, but more slowly. Caps are, in effect, time-release mechanisms, delivering a lower dose of contaminants to our environment over a longer period of time. The long term effect is that all the non-degradable contaminants will ultimately diffuse into the environment, and into the food web.

Even much of the highly contaminated material dredged from the harbor, will undergo leeching-and-diffusion under the disposal plan in *Aternative I*. The proposed plan calls for almost half such material to be disposed of at an "in-water disposal facility" along the harbor's shoreline, near Baltimore Woods. The hazardous material would be buried and capped there below river level, where it will lie perpetually saturated in ground water. We can expect that harmful contaminants will continue to slowly leech into the groundwater, and then migrate with the ground water into the river, into our environment, and into the food web. The in-water disposal facility, by its very design, will not sequester the toxic substances. It will slowly release them into the Willamette River, for millennia.

Alternative I invokes in us concerns about Murphy's Law: "Anything that can go wrong, will." Given the uncertainties we feel about the present, how confident can we be that *Alternative I* safeguards will hold up against plausible major events in the next thousand years? If the past is any predictor, major events will include: ten "hundred-year" floods, three magnitude 9 + earthquakes, and twenty majors wars (including possible nuclear exchanges, sabotage and terrorism). It has been noted that clay caps on the riverbed could be ruptured by relatively mundane snafus in the working harbor overhead. It is likely that breeches, large and small, will occur, releasing contaminants back into the river system, and negating our cleanup efforts.

Finally, we feel there is a moral dimension to carrying out a plan that releases permanently harmful substances into the environment. *Alternative I* anticipates that health authorities will someday be able to "relax" their advisories on the eating of resident fish from the harbor. That may be so for adults. But resident fish will never be deemed safe for children – not in a thousand years.

Recommendations:

Abandon *Alternative I*. Its emphasis on leeching-and-diffusion for the disposal of harmful substances fails to meet criteria for the protection of human and ecological health. The burying of contaminants in and along the river leaves the area at a high risk of breeches. It thus fails to meet criteria for long-term effectiveness.

Expend resources commensurate with the size, challenge and benefits of the project. Compared with Portland's $1.4-billion *Big Pipe Project,* the *Portland Harbor Cleanup* is bigger, more difficult, and more vital to get done right. Expect to spend more than $1.4 billion.

Choose a plan that calls for the removal and sequestering of as much harmful contaminant as doable. We owe this to our descendants.

Choose Alternative G. Of plans under consideration, we feel it best meets our recommendations.

This comment was written, at the request of the members of FoBW, by:

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